Pyramix™ 6

DIGITAL AUDIO WORKSTATION

Installation Guide

MERGING

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Installation Guide

IMPORTANT NOTICE:

Please read the following information very carefully before attempting any installation. Failure to comply with the precise instructions may result in damage to your Merging hardware. Please read this entire section of the manual carefully before installation.

STATIC DANGER NOTICE:

Please note that the Mykerinos and Mykerinos-X boards contain delicate electronic components that can be damaged or even destroyed when exposed to static electricity. Take all necessary precautions not to discharge static electricity when touching any of the Mykerinos components.

INFORMATION FOR THE USER:

Mykerinos, Mykerinos-X and their daughter cards comply with the following specifications:

EMC Emissions

EN 55022 : 1994 /A1 : 1995 /A2 : 1997 Class A ITE emissions requirements (EU)

FCC 47 CFR Part 15 Class A emissions requirements (USA)

EMC Immunity

EN 50082-1: 1992 EMC residential, commercial and light industrial generic immunity standard.

FCC Notice

This product has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

These limits are designed for providing reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions contained in this manual, may cause harmful interference to radio and television communications. However,

there is no guarantee that interference will not occur in a particular installation.

> **Note:** Connecting this device to peripheral devices that do not comply with CLASS A requirements or using an unshielded peripheral data cable could also result in harmful interference to radio or television reception. The user is cautioned that any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. To ensure that the use of this product does not contribute to interference, it is necessary to use shielded I/O cables.

CE Notice

Such a CE marking is indicative that this system's devices meet the following applicable technical standards:

- EN 55022 – "Information Technology Equipment - Radio disturbance characteristics Limits and methods of measurement"
- EN 50082-1: 1992 – "Electromagnetic compatibility – Generic immunity standard Part 1:Residential, commercial, and light industry"

This product is classified for use in a typical Class A commercial environment, and is not designed or intended for use in

other EMC environments. The user of this product is obliged for proper use and installation of the product and for taking all

steps necessary to remove sources of interference to telecommunications or other devices.

Hardware Warranty Information

This product is warranted to be free of defects in materials and workmanship for a period of one year from the date of purchase. Merging Technologies, Inc. extends this Limited Warranty to the original purchaser.

In the event of a defect or failure to confirm to this Limited warranty, Merging Technologies, Inc. will repair or replace the product without charge within sixty (60) days. In order to make a claim under this limited warranty, the purchaser must notify Merging Technologies, Inc. or their representative in writing, of the product failure. In this limited warranty the customer must upon Merging Technologies, Inc. request, return the product to the place of purchase, or other local designation, for the necessary repairs to be performed. If the consumer is not satisfied with the repair, Merging Technologies, Inc. will have the option to either attempt a further repair, or refund the purchase price.

This warranty does not cover: (1) Products which have been subject to misuse, abuse, accident, physical damage, neglect, exposure to fire, water or excessive changes in the climate or temperature, or operation outside maximum rating. (2) Products on which warranty stickers or product serial numbers have been removed altered or rendered illegible. (3) The cost of installations, removal or reinstallation. (4) Damages caused to any other products.

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Installation Guide

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Introduction

Thank you!

Congratulations on your purchase of **Pyramix Virtual Studio**. More than just a product, this is a gateway to the future of sound recording, editing, mixing and mastering. You have joined a worldwide community of users who have already discovered the Pyramix advantage.

> **Note:** IMPORTANT! - The first thing you need to do is register your software to acquire your Pyramix key(s) and to be included in our user support list.

Please also subscribe to the User Forum at:

http://www.merging.com/forum/

Scope

This document is intended to get you up and running with Pyramix and Pyramix MassCore as quickly as possible. For more detailed information about the Mykerinos and Mykerinos X hardware and the Pyramix software please see their specific Guides.

If you have purchased Pyramix Virtual Studio as an integrated (Turnkey) system, the installation information in this guide will be redundant, since these systems come with all hardware and software pre-installed. If you are configuring your own system, please refer to the following instructions.

System Requirements

Wintel platforms tend to increase in number of cores, speed and performance at a tremendous rate. New and faster processors are released almost on a monthly basis.

The following is the current hardware recommendation for Pyramix V6 and MassCore™ systems as at the 3rd of December, 2007.

We maintain a list of up to date PC configurations in the Support Section of our website at:

http://www.merging.com

Pyramix V6 Mykerinos Systems

- **CPU**: The **Intel Core 2 Duo** (**E6550 or higher**) series CPU is the minimum recommended processor for Pyramix version 6.0 systems.
- **Mother Board**: The **Intel DP35DP** with the **P35** chipset is the current recommended and certified-board.

Note: Avoid any **Intel X5000** chipset series motherboards, present in some **Intel Macs**, certain **Dell** machines as well as various off-the-shelf motherboards.

Two additional possible but currently un-certified motherboards are the **ASUS P5E WS Professional** and the **Foxconn X38** both offering **PCI legacy** and **PCIe slots** for use with both **Mykerinos MB1-5 PCI** DSP boards as well as **Mykerinos X-30/X-50 PCIe** boards. Any system built on one of these boards should include a Core2 processor and at least **1GB** of DDR2 series RAM (Minimum **2GB** for Windows **Vista**.

- **RAM**: minimum **1GB** RAM under Windows **XP**. Minimum **2GB** under Windows **Vista**

Note: DDR RAM DIMMs should always be installed in matched pairs. I.e. same manufacturer, same size and same series. Also, take note of the motherboard manufacturers recommendations. Reputable memory manufacturers will also be able to advise on compatible memory.

- **OS**: We recommend and certify **Pyramix Version 6** under **Windows XP SP2 Professional** and Windows **Vista Business**.

Note: *Although not certified, Pyramix has also been observed to work under the Home editions of XP SP2 and Vista without any known edition related issues to date.*

Note: NEVER attempt to install Pyramix on Windows **NT Server**)

- **Graphics Card**: The recommended graphics cards are the **ATI Radion** series of PCIe graphics cards from the **X1550** fanless series (and higher) or the **Matrox Parhelia** dual head series.

Note: When using the **Parhelia** graphics cards make sure you have updated to the latest **bios** version since a known CONFLICT exists with older **Parhelia** bios versions and Pyramix Version 6.

Other Components

- Sufficient HD space and speed for your audio media files. The speed and amount of disk space required depends on sample rate, wordlength, number of tracks and length of program material.
- A typical SATA drive is sufficient for 48 tracks at 48 kHz. Higher track-counts and/or higher sampling rates will require multiple drives configured in Raid 0 or Raid 5
- We recommend disks should be formatted as **NTFS** volumes
- **CD-ROM** drive or better (since Pyramix software is delivered on a CD)
- SXGA 17" monitor or better. Multiple 19” monitors highly recommended
- 3 button mouse

Pyramix MassCore Systems

- **CPU**: For **MassCore** systems the currently recommended processor for best performance is the Intel **Core2 Quad Q6600** CPU.
- **Mother Board**: The **Intel DP35DP** with the **P35** chipset is the current recommended and certified-board.

Note: Avoid any **Intel X5000** chipset series motherboards, present in some **Intel Macs**, certain **Dell** machines as well as various off-the-shelf motherboards.

- 1 or more available PCIe x1 slots for Mykerinos PCI Express based systems
- **RAM**: Minumum 2GB RAM

Note: DDR RAM DIMMs should always be installed in matched pairs. I.e. same manufacturer, same size and same series. Also, take note of the motherboard manufacturers recommendations. Reputable memory manufacturers will also be able to advise on compatible memory.

- **OS**: We recommend and certify **Pyramix Version 6** under **Windows XP SP2 Professional** and Windows **Vista Business**.

Note: *Although not certified, Pyramix with MassCore™ has also been observed to work under the Home editions of XP SP2 and Vista without any known edition related issues to date.*

Other Components

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- A typical SATA drive is sufficient for 48 tracks at 48 kHz. Higher track-counts and/or higher sampling rates will require multiple drives configured in Raid 0 or Raid 5
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- SXGA 17" monitor or better. Multiple 19” monitors highly recommended
- 3 button mouse

PC Setup

Display Settings

Pyramix requires a minimum display resolution of 1024x768 in 256 colors which **MUST** be set to ***small fonts*** mode.

Power Management

N.B. As with other Digital Audio Workstations and Non-Linear Editors, we recommend setting the PC to an **Always On** Power management scheme. (In Windows XP: **Start > Settings > Control Panel** double-click **Power Options**. Choose **Always On** from the **Power Schemes** drop down list.) This allows the monitor to be turned off by the system but disables hard-disk spin down and Standby.

The Mykerinos and Mykerinos-X cards are **not** designed to support Standby modes

Other Applications

Like all Digital Audio Workstations, Pyramix works best when there are no other unnecessary applications or services running.

Video and Pyramix on one PC

To ensure a very smooth system, (especially for seeking) when playing video with Pyramix on the same computer, we recommend a dual or quad core Processor PC with one or two CPUs, a dedicated hard drive for the video and Windows XP Pro.

Recommended options

Internet Connection (this will allow you to upgrade the software easily by connecting to our Web site, and to communicate queries or suggestions to Merging by Email).

PCI MIDI Interface card (where none is fitted to the motherboard) or Sound Card with Midi interface or USB MIDI driver (where appropriate) for customers wishing to use Pyramix MIDI functions, for example to interface Pyramix with an external Midi remote controller such as:

- J.L. Cooper MCS-series
- Raditek SAC-2k
- Mackie Control

or external digital mixer such as:

- Sony DMX-R100
- Yamaha DM-2000
- Yamaha DM-1000
- Yamaha 02R-96

Hardware Installation

There are two main components to Pyramix Virtual Studio: One or several Mykerinos or Mykerinos-X DSP boards, and the Pyramix 6.x application software.

IMPORTANT NOTICE:

Please read the following information very carefully before attempting any installation. Failure to comply with the precise instructions may result in damage to your Merging hardware. Please read the entire chapter carefully before installation.

STATIC DANGER NOTICE:

Please note that the Mykerinos Audio Board contains delicate electronic components that can be damaged or even destroyed when exposed to static electricity. Please take all of the necessary precautions when handling the Mykerinos board and all other PC computer cards.

Mykerinos Card Installation

Note: Note: for multiboard installation care must be taken in the selection of the PC chassis components to ensure adequate thermal dissipation through sufficient fan air cooling.

Inserting the Mykerinos Audio Board(s)

- Make sure the computer is turned off (and unplugged) before installing the Mykerinos board.
- To avoid the possibility of static electricity damage to the PC or the Mykerinos board(s) please use an anti-static strap to connect yourself to a known good earth.
- Remove the computer covers required to gain access to the peripheral slots.
- Locate a free PCI (Mykerinos) or PCI-e (Mykerinos-X) slot. It is generally inadvisable to use the slot adjacent to an AGP slot. Remove a slot / bracket for the chosen slot(s) (if needed)
- Insert the Mykerinos board(s) into the chosen slot(s)
- Ensure each Mykerinos is properly seated in the slot
- Fit any extra break-out connector brackets (if applicable)
- Fasten the mounting screw to secure the Mykerinos back-plate to the PC frame

Multi-board Installation

- For multiboard installation it is advisable to insert all Mykerinos boards in adjacent slots sharing the same PCI bus segment. Please refer to PC motherboard documentation.
- In order to enable multi-board operation, all Mykerinos cards in the PC must to be connected together using a special HDTDM ribbon cable with 30 pin plugs. This cable has to be plugged into the multi-pin connectors located on the top edge of the I/O daughter cards. Please contact your Merging Technologies Sales Partner for information on how to order the HDTDM ribbon cable.

Note: to reduce the risk of electro-magnetic interference being induced by other PCI cards into the highly sensitive Mic Preamp circuitry, systems equipped with Merging's **DUAL** (Analog + AES) daughtercard are best installed in a slot with no other card inserted in the immediately adjacent slot. (I.e. the component side of the card, which will be on the left looking from the front of a conventional PC chassis.)

Pyramix Software Installation

Note: You must have full Administrator Access to install Pyramix.

Driver Signing

Important! Before attempting to install the Pyramix Virtual Studio software please check the following setting:

Start > Settings > Control Panel > System : Hardware

Click on the **Hardware** Tab, then click on **Driver Signing**. The **Driver Signing Options** dialog opens:

Driver Signing Options
During hardware installation, Windows might detect software that has not passed Windows Logo testing to verify its compatibility with Windows. (Tell me why this testing is important.)
What action do you want Windows to take?
Ignore - Install the software anyway and don't ask for my approval
Warn - Prompt me each time to choose an action
Block - Never install unsigned driver software
Administrator option
Make this action the system default
OK
Cancel

Windows Driver Signing Options dialog

Make sure the middle option **Warn** is selected.

Note: This dialog is not available in Windows Vista. Vista is preset to **Warn**.

Running the Installer

Once the Mykerinos card(s) have been properly installed, you can now install the Pyramix 6.x software.

To install the Pyramix Virtual Studio 6.x software insert the Pyramix Virtual Studio CD-ROM. The installation program will auto-start on a PC where auto-start is configured **on**. Otherwise, double click on the CD-ROM icon.

Please follow the automatic installation procedure accepting the option to install unsigned drivers (one per Mykerinos board) and re-boot your PC once setup is complete.

Note: If the installation appears to freeze for a long period please check that the **Driver Signing** warning dialogue is not hidden behind another Window. Installation will not continue until you click **OK** in this dialog.

WARNING: Certain computers do not properly shut down despite the reboot command issued by the installer but only perform a log off. In this case, please activate a full shut down manually.

Pyramix Software Registration

The **Pyramix Virtual Studio** software and its various software options are protected by an authorization key mechanism which uses a unique registration key number generated by Merging Technologies. Based on purchased software components, this key is unique to your Mykerinos board serial number, your Company Name and your User name. Once you have registered your software you will be provided with this Key or Keys (depending on the chosen options).

In a multi-board system only one key is required for all connected boards. The master board validates the others.

If you did not receive this key, have lost it or would like to change the user and/or company name, please contact your Merging Sales Partner with your Mykerinos serial #, your User Name, your Company Name and the list of purchased software components. Usually, a key can be issued within one business day, after the verification of your personal data has been completed.

Entering your Key(s)

After the Pyramix installation process you will be prompted to enter your **Authorization Key**. If you click **Yes** the **MT Security Settings** dialog will be launched automatically, allowing the Key or Keys to be entered immediately. If you choose not to enter your Key at this point you can do so later by choosing one of the following procedures:

1. Double-click the file **YourPersonalKeyXXXXX.mtk**. This is attached to the email containing your Key(s).
2. Open the **MT Security Settings Control Panel**
   (Windows Task Bar **Start > Control Panel > MT Security Settings**),
   click the **Import Key** button and browse for your Key file called

   YourPersonalKeyXXXXX.mtk
3. Open the **MT Security Settings Control Panel** (as above), in the **Registration** section select the board number corresponding to the serial number for your Keys or HASP Key for a dongle, click the **Enter Key** button and type your **User Name**, **Company Name** and **Key** then click **OK.** Repeat this step for each Keys listed in the email.

Changing or re-entering a Key

Should you need to subsequently change or re-enter a **Key**, follow the appropriate option above.

The key system is "smart". Only one key or set of keys is required regardless of the number of boards in a system. Any card can hold this key set as the authorization is processed based on a "Logical OR" of all keys present on any and all Mykerinos boards. Of course this Logical OR will only process keys with identical User Name and Company Name to the one entered in the key enabling window.

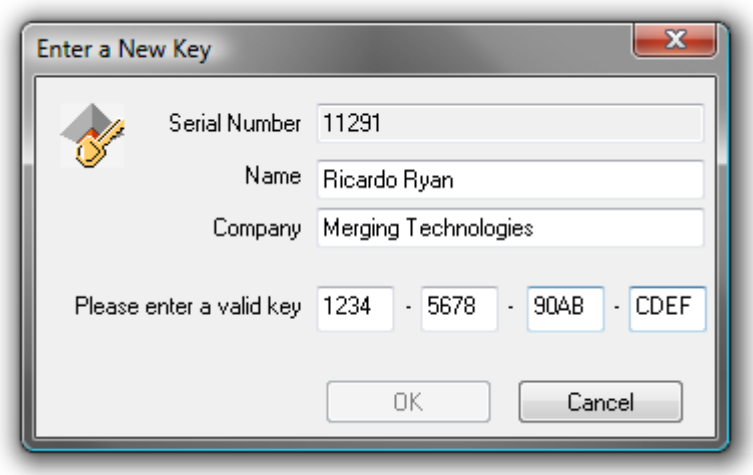
Evaluation Mode

If Pyramix is started without a valid registration key, the software will recognize that no valid key is available and will start in “evaluation” mode, which only allows for basic operation of the software.

To enter the key (please first quit Pyramix, if already started) you have to open the **MT Security Settings** application, accessible from the Windows menu:

Open Windows **Control Panel** and then the **MT Security Settings** window.

Click onto the **New Key** button to display the Pyramix authorization dialog.

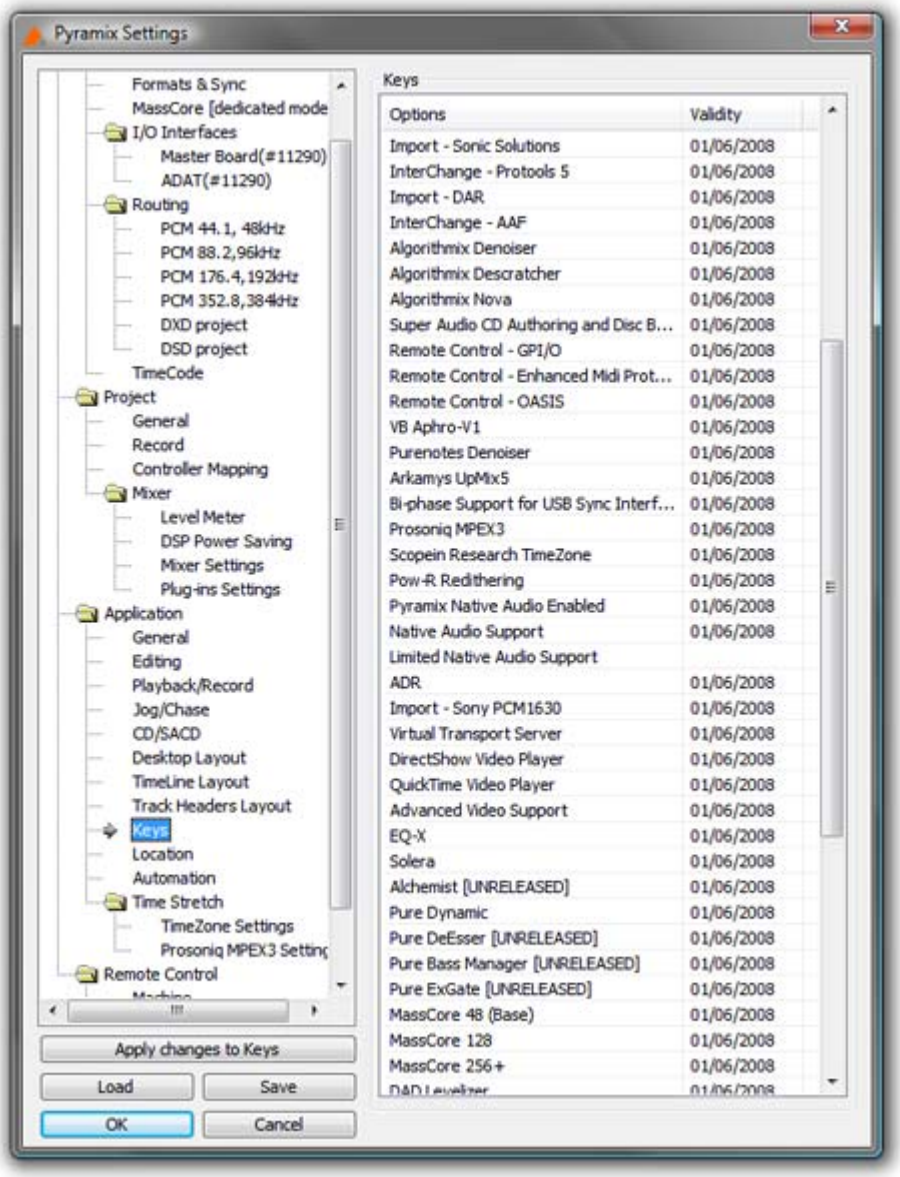


Pyramix authorization dialog

Within this dialog you have to enter your name, your company name and the authorization key. Please enter all information exactly as printed on the Registration information that came with your system. If you do not enter a valid key or misspell the user or company name, the **OK** button will remain grayed out.

If your key is recognized to be a valid key, the **OK** button will light. Hit the **OK** button and begin to enjoy the full capabilities of your Pyramix system.

At any time you can check the serial number of your Mykerinos card(s) in **Settings > All Settings > Hardware > I/O Interfaces** and the software options enabled in your system in the **Settings > All Settings > Application > Keys** page.



General Settings, Keys Tab pane

MassCore Installation

Conditions

- You **MUST** be logged in as an **Administrator** to install **MassCore**

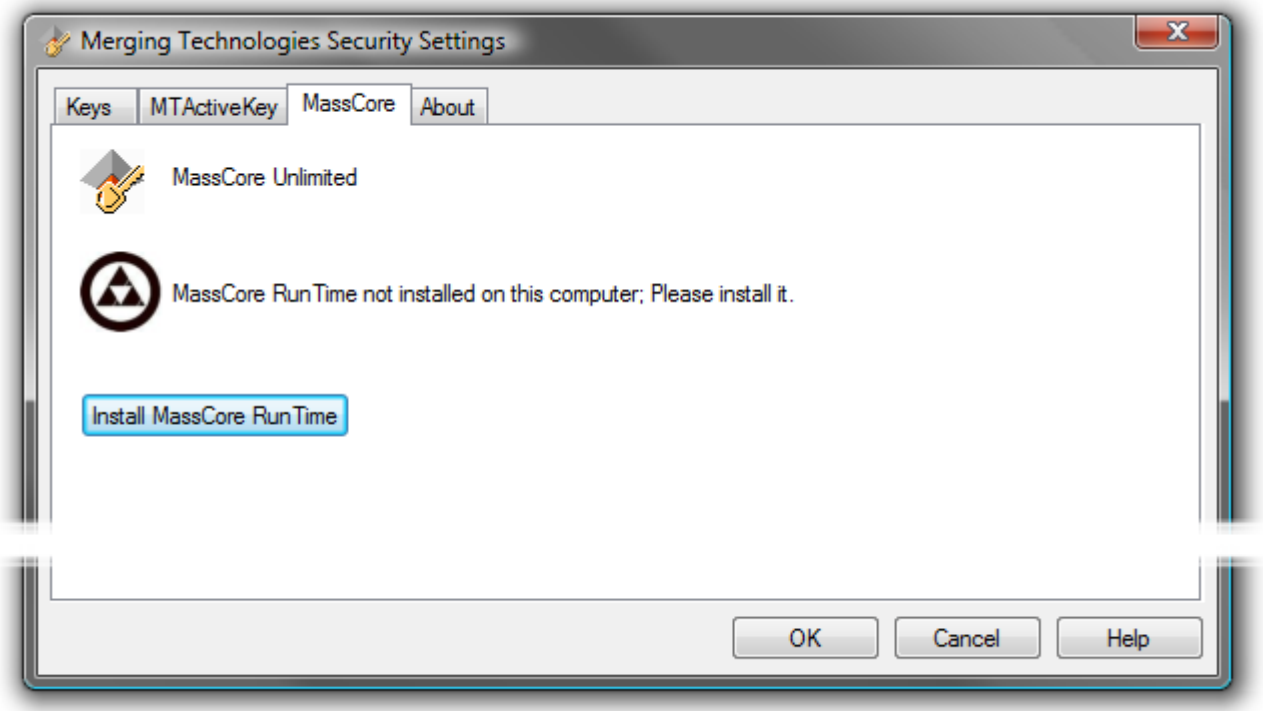
  Note: You do not need to be logged in as an Administrator to **RUN** Pyramix with MassCore™, just to install it.

- You must have at least one Mykerinos board in your system.
- You must have a MassCore Key in order to proceed with the installation. Please provide your Mykerinos serial number to Peter Weber

  pweber@merging.com

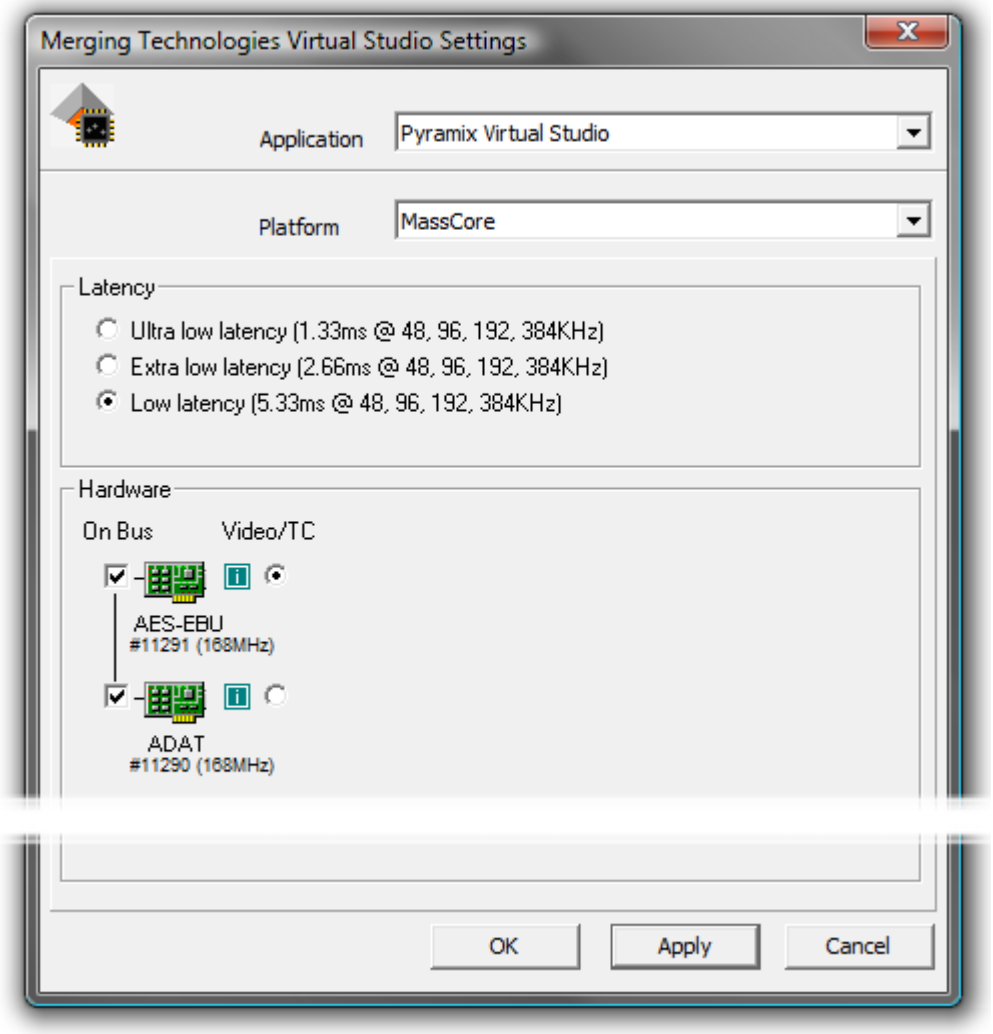
MassCore Installation

1. Install V6.0 Pyramix.exe
2. Restart your system after the Pyramix install
3. Enter Your Key(s) in **MT Security Panel** (make sure you have a valid MassCore key)
4. In the **MT Security Panel** select the MassCore Tab
5. Press the **Install MassCore RunTime** button (will only be enabled if the MassCore Base Key is present)



VS3 merging Technologies Security Settings dialog

6. Restart System after install
7. Launch the **VS3 Control Panel**
8. In the Platform section select "MassCore"
9. We recommend by default the use of **Low latency** mode (**Ultra low latency** & **Extra low latency** are available only for Mykerinos-X users)



VS3 Merging Technologies Virtual Studios Settings dialog

First launch

Important! After installation has been completed, please reboot the PC before attempting to launch Pyramix Virtual Studio. Then open the **VS3 control panel** application.

Start > Programs > Pyramix > VS3 control panel

The default Tab Pane is **Configuration**.

For Pyramix systems with a single Mykerinos board:

Leave all default selections as they are, making sure the **On Bus** checkbox for your Mykerinos card is indeed checked then save and exit the VS3 control panel application.

For Pyramix systems with a multiboard configuration:

- Make sure there is a check mark in the **On Bus** boxes for each board installed.
- Check that the **Application** combo box is showing **Pyramix**. If not, select **Pyramix** from the list.
- Select **XDTDM** from the **Buses Mode** combo box
- Select which board is to provide an external **Video/TC** reference with the radio buttons next to the board icons.
- For now, leave the default **DSP Allocation** settings as they are.
- When the VS3 panel **Do you want to save routing?** dialog box appears, click on **OK**
- the VS3 control panel will close

Double-click on the **Pyramix Virtual Studio** desktop icon to launch Pyramix. The **User Manual** and **Quick Start Guide** are available from within Pyramix and may be accessed via the **Help** menu or by pressing F1, or online at merging.com

Troubleshooting

Please visit regularly:

www.merging.com

for the latest Troubleshooting Guide and FAQ sections.

Contacting Merging

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For all documentation inquiries or suggestions for improvement:

http://www.merging.com

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